

## SEQUENCE LISTING

<110> Eiken Kagaku Kabushiki Kaisha

70900  
<120> Method of Synthesizing Nucleic Acid.

<130> E2-001PCT

<140>

<141>

<150> JP-1998-317476

<151> 1998-11-09

<160> 29

<170> PatentIn Ver. 2.0

<210> 1

<211> 52

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized primer sequence

90

<400> 1

cgactctaga ggatccccgg gtactttttg ttgtgtggaa ttgtgagcgg at

52

<210> 2

<211> 51

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized primer sequence

<400> 2

acaacgtcgt gactgggaaa accctttttg tgcgggcctc ttcgctatta c

51

<210> 3

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized primer sequence

<400> 3

actttatgct tccggctcgt a

21

<210> 4

<211> 17

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized primer sequence

<400> 4

gttgggaagg gcgatcg

17

<210> 5

<211> 600

<212> DNA

<213> Bacteriophage M13mp18

<400> 5

gcgcccataa cgcaaaccgc ctctccccgc gcgttggccg attcattaat gcagctggca 60  
cgacaggttt cccgactgga aagcgggcag tgagcgcaac gcaattaatg tgagttagct 120  
cactcattag gcaccccagg ctttacactt tatgcttccg gctcgtatgt tgtgtggaat 180  
tgtgagcgga taacaatttc acacaggaaa cagctatgac catgattacg aattcgagct 240  
cggtacccgg ggatccctta gagtcgacct gcaggcatgc aagcttggca ctggccgtcg 300  
ttttacaacg tcgtgactgg gaaaaccctg gcgttaccca acitaaatgc cttgcagcac 360

92

atcccccttt cgccagctgg cgtaatagcg aagaggcccg caccgatcg ccttcccaac 420  
agttgcgcag cctgaatggc gaatggcgct ttgcctgggt tccggcacca gaagcgggtgc 480  
cggaagctg gctggagtgc gatcttcctg aggccgatac ggicgtcgtc ccttcaaact 540  
ggcagatgca cggttacgat gcgcccattc acaccaacgt aacctatccc attacgggtca 600

<210> 6

<211> 63

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized primer sequence

<400> 6

ctcttccaaa agtaaggcag gaaatgtgaa accagatcgt aatttggaag acccagcatc 60  
cag 63

<210> 7

<211> 43

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized primer sequence

93

<400> 7

gtggattcgc actcctcccg ctgacggga cctgcctcgt cgt

43

<210> 8

<211> 16

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized primer sequence

<400> 8

gccacctggg tgggaa

16

<210> 9

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized primer sequence

<400> 9

94

ggcgagggag ttcttcttct ag

22

<210> 10

<211> 430

<212> DNA

<213> Hepatitis B virus

<400> 10

ctccttgaca ccgcctctgc tctgtatcgg gaggccttag agtctccgga acattgttca 60  
cctcaccata cagcactcag gcaagctatt ctgtgttggg gtgagttaat gaatctggcc 120  
acctgggtgg gaagtaattt ggaagacca gcatccaggg aattagtagt cagctatgtc 180  
aatgttaata tgggcctaaa aatcagacaa ctattgtggt ttcacatttc ctgccttact 240  
tttgggaagag aaactgtttt ggagtatttg gtatcttttg gagtgtggat tcgcactcct 300  
cccgttaca gaccaccaa tgccccctatc ttatcaacac ttccggaaac tactgttgtt 360  
agacgacgag gcaggteccc tagaagaaga actccctcgc ctgcagacg aaggctctca 420  
tcgccgcgtc 430

<210> 11

<211> 293

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 11

acaacgtcgt gactgggaaa accctttttg tgcggggcctc ttcgctatta cgccagctgg 60  
 cgaaaggggg atgtgctgca aggcgattaa gttagggtaac gccagggttt tcccagtcac 120  
 gacgttgtaa aacgacggcc agtgccaagc ttgcatgcct gcaggtcgac tctagaggat 180  
 ccccggttac cgagctcgaa ttcgtaatca tggatcatagc tgtttccctgt gtgaaattgt 240  
 tatccgtca caattccaca caacaaaaag taccggggga tcctctagag tcg 293

<210> 12

<211> 293

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
 synthesized sequence

<400> 12

cgactctaga ggatccccgg gtactttttg ttgtgtggaa ttgtgagcgg ataacaattt 60  
 cacacaggaa acagctatga ccatgattac gaattcgagc tcggtaccgg gggatcctct 120  
 agagtcgacc tgcaggcatg caagcttggc actggccgtc gttttacaac gtcgtgactg 180  
 ggaaaaccct ggcgttaccc aacttaatcg ccttgcagca catccccctt tcgccagctg 240  
 gcgtaatagc gaagaggccc gcacaaaaag ggttttccca gtcacgacgt tgt 293

<210> 13

<211> 459

<212> DNA

96

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 13

acaacgtcgt gactgggaaa accctttttg tgcgggcctc ttcgctatta cgccagctgg 60  
cgaaaggggg atgtgctgca aggcgattaa gttgggtaac gccagggttt tcccagtcac 120  
gacgttgtaa aacgacggcc agtgccaagc ttgcatgcct gcaggtcgac tctagaggat 180  
ccccgggtac cgagctcgaa ttcglaatca tggtcatagc tgtttcctgt gtgaaattgt 240  
tatccgctca caattccaca caacaaaaag taccggggga tcctctagag tcgacctgca 300  
ggcatgcaag cttaggcactg gccgtcgttt tacaacgtcg tgactgggaa aaccctggcg 360  
ttaccaact taatgcctt gcagcacatc cccctttcgc cagctggcgt aatagcgaag 420  
aggcccgcac aaaaagggtt ttcccagtcg cgacgttgt 459

<210> 14

<211> 458

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 14

97



cgactctaga ggatccccgg giactttttg ttgtgtggaa ttgtgagcgg ataacaattt 60  
cacacaggaa acagctaiga ccatgattac gaattcgagc tcggtacctg gggatcctct 120  
agagtcgacc tgcaggcatg caagcttggc actggccgtc gttttacaac gtcgtgactg 180  
ggaaaacctt ggcgttacct aacttaatcg ccttgcagca catccccctt tcgccagctg 240  
gcgtaatagc gaagaggccc gcacaaaaag ggttttccca gtcacgacgt tgtaaaacga 300  
cggccagtgc caagcttgca tgcctgcagg tcgactctag aggatccccg ggtaccgagc 360  
tcgaattcgt aatcatggtc atagctgttt cctgtgtgaa attgttatcc gctcacaatt 420  
ccacacaaca aaaagtacct ggggatccct tagagtcg 458

<210> 15

<211> 790

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 15

acaacgtcgt gactgggaaa accctttttg tgcgggcctc ttcgctatta cgccagctgg 60  
cgaaaggggg atgtgctgca aggcgattaa gttaggtaac gccagggttt tccagtcac 120  
gacgttgtaa aacgacggcc agtgccaagc ttgcatgcct gcaggtcgac tctagaggat 180  
ccccgggtac cgagctcgaa ttcgtaatca tggatcatagc tgtttcctgt gtgaaattgt 240  
tatccgctca caattccaca caacaaaaag taccggggga tcctctagag tcgacctgca 300  
ggcatgcaag cttaggcactg gccgtcgttt tacaacgtcg tgactgggaa aacctggcg 360  
ttaccaact taatgcctt gcagcacatc cccctttcgc cagctggcgt aatagcgaag 420

98

aggcccgac aaaaagggtt ttcccagica cgacgttgta aaacgacggc cagtgccaaag 480  
 ctigcatgcc tgcaggtcga cctagagga tccccgggta cttttgttg tgtggaattg 540  
 tgagcggata acaatttcac acaggaaaca gctatgacca tgattacgaa ttcgagctcg 600  
 gtacccgggg atcctctaga gtgcacctgc aggcatgcaa gcttggcact ggccgtcggt 660  
 ttacaacgtc gtgactggga aaacctggc gtacccaac ttaatgcct tgcagcacat 720  
 cccctttcg ccagctggcg taatagcgaa gaggccgca caaaaagggt ttcccagtc 780  
 acgacgttgt 790

<210> 16

<211> 789

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
 synthesized sequence

<400> 16

cgactctaga ggatccccgg gtactttttg ttgtgtggaa ttgtgagcgg ataacaattt 60  
 cacacaggaa acagctaiga ccatgattac gaattcgagc tcggtacccg gggatccctt 120  
 agagtcgacc tgcaggcatg caagcttggc actggccgtc gttttacaac gtctgactg 180  
 ggaaaaccct ggcgttaccc aacttaatcg ccttgcagca catccccctt tcgccagctg 240  
 gcgtaatagc gaagaggccc gcacaaaaag ggttttccca gtcacgacgt tgtaaaacga 300  
 cggccagtgc caagcttgca tgcctgcagg tcgactctag aggatccccg ggtaccgagc 360  
 tcgaattcgt aatcatggtc atagctgttt cctgtgtgaa attgttatcc gtcacaatt 420  
 ccacacaaca aaaagtaccc ggggatcctc tagagtcgac ctgcaggcat gcaagcttgg 480

99

cactggccgt cgttttaciaa cgtcgtgact gggaaaaccc tttttgtgcg ggctcttctg 540  
 ctattacgcc agctggcgaa agggggatgt gctgcaaggc gattaagtgt ggtaacgcca 600  
 gggttttccc agtcacgacg ttgtaaaacg acggccagtg ccaagcttgc atgcctgcag 660  
 gtcgactcta gaggatcccc gggtagcgag ctggaattcg taatcatggt catagctgtt 720  
 tctgtgtga aattgttatc cgctcacaat tccacacaac aaaaagtacc cggggatcct 780  
 ctagagtcg 789

<210> 17

<211> 310

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
 synthesized sequence

<400> 17

gtggattcgc actcctcccg ctgacggga cctgcctcgt cgtctaaciaa cagtagtttc 60  
 cggaagtgtt gataagatag gggcatttgg tggctctgtaa gcgggaggag tgcgaatcca 120  
 cactccaaaa gataccaaat actccaaaac agttttctctt ccaaaaagtaa ggcaggaaat 180  
 gigaaccac aatagtgtc tgatttttag gcccatatta acattgacat agctgactac 240  
 taattccctg gatgctgggt ctccaaatt acgatctggt ttacatttc ctgccttact 300  
 tttaggaagag 310

<210> 18

<211> 465

1000

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized sequence

<400> 18

gtggattcgc actcctcccg ctgatcggga cctgcctcgt cgtctaacaa cagtagtttc 60  
cggaagtgtt gataagatag gggcatttgg tggctctgtaa gcgggaggag tgcgaatcca 120  
cactccaaaa gataccaaat actccaaaac agtttctctt ccaaaagtaa ggcaggaaat 180  
gtgaaaccac aatagttgtc tgatttttag gcccatatta acattgacat agctgactac 240  
taattccctg gatgctgggt ctcccaaatt acgatctggt ttacatttc ctgccttact 300  
tttgggaagag aaactgtttt ggagtatttg gtatcttttg gagtgtggat tcgcactcct 360  
cccgttaca gaccacaaa tgcacctatc ttatcaacac ttccggaaac tactgttgtt 420  
agacgacgag gcaggctccg atcagcggga ggagtgcgaa tccac 465

<210> 19

<211> 20

<212> DNA

<213> M13mp18

<400> 19

ccggggatcc tctagagtcg

20

<210> 20

101

<211> 20

<212> DNA

<213> M13mpl8 mutant

<400> 20

ccgggggatcc tctagagtca

20

<210> 21

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized primer sequence

<400> 21

cgactctaga ggatccccgg tttttgttgt gtggaattgt gagcggat

48

<210> 22

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially

102

synthesized primer sequence

<400> 22

tgactctaga ggatccccgg tttttgttgt gtggaattgt gagcggat

48

<210> 23

<211> 47

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized primer sequence

<400> 23

cgtcgtgact gggaaaaccc tttttgtgcg ggctcttcg ctattac

47

<210> 24

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized primer sequence

103

<400> 24

actttatgct tccggctcgt a

21

<210> 25

<211> 17

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized primer sequence

<400> 25

gttgggaagg gcgatcg

17

<210> 26

<211> 44

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized primer sequence

<400> 26

tgttcctgat gcagtgggca gctttagtct gcggcgggtgt tctg

44

104

<210> 27

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized primer sequence

<400> 27

tgctgggtcg gcacagcctg aagctgacct gaaataacctg gcctg

45

<210> 28

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized primer sequence

<400> 28

tgcttgtggc ctctcgtg

18

<210> 29

105



<211> 17

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
synthesized primer sequence

<400> 29

gggtgtggga agctgtg

17

1006